REMARKS/ARGUMENTS

Claims 61-86, and 156-192 are pending in this application. By this Amendment, claims 61, 66, 68, 69, 72, and 84 have been amended, claims 111-135 and 137-155 have been canceled without prejudice or disclaimer, and claims 156-192 have been added.

Claims 61 and 84-86 stands objected to for informalities. The preamble of claim 61 has been amended to recite a data processing method for transmitting data through a communication channel in a mobile communication system for indicate the use or purpose of the method, as suggested by the Examiner. Further, claims 84-86, specifically, claim 84, has been amended to an apparatus independent claim, as suggested by the Examiner. Hence, withdrawal of these objections is respectfully requested. .

Claims 61-86 stand rejected under 35 U.S.C. §112, second paragraph. Claims 61 and 84 has been amended to overcome this rejection for similar reasons set forth above. As per claim 66-68, the phrase of "a size of a block interleaver" has been changed to "a channel interleaver size." A channel interleaver used in a communications system has a size which is generally called "a channel interleaver size" or "a channel interleaver block size," and such amendments are clear to one of ordinary skill in the art. Hence, withdrawal of this rejection is respectfully requested.

Claims 61-63, 65-69, 71 and 84-86 stand rejected under 35 U.S.C. §102(b) over 3GPP TS 25.212 V3.1.0 (hereinafter, "3GPP TS"). This rejection is respectfully traversed.

3GPP TS fails to disclose all the claimed features and the combination thereof of independent claims 61 and 84, as required under Section 102. For example, 3GPP TS does not disclose or teach "adjusting the coding rate at the encoder by varying the coding rate from the initial value to an adjusted value," and the combination thereof, as recited in independent claim 61, or "a channel encoder encoding input data to be transmitted at an adjusted coding rate, the adjusted coding rate being adjusted according to a ratio of a channel interleaver size and a number of bits of the input data," and the combination thereof, as recited in independent claim 84.

The Patent Office concludes that 3GPP TS discloses or teaches the Rate Matching block of the Channel Encoder by varying the coding rate from the initial value to an adjusted value using repetition bits or puncturing (4.2.7 on page 20 of the 3GPP TS). It is respectfully submitted that Figure 2 on page 10 of 3GPP TS is not a channel encoder corresponding to "the encoder" in claim 61. As indicated on page 10 of 3GPP TS, Figure 2 illustrates "Transport channel multiplexing structure for downlink" in a 3GPP system. The Channel coding block in Figure 2 of 3GPP TS corresponds to "the encoder" in claim 61, which is clear to one of ordinary skill in the art from Figures 2-5 in this application.

The Rate Matching block in Figure 2 of 3GPP TS corresponds to "the rate matching block" (S21, S31, S43, S53) of Figures 2-5 of this application. Claim 61 recites that a coding rate of "the encoder" is varied from "the initial value" to "the adjusted value." 3GPP TS, however,

does not teach the variation of a coding rate in the channel coding block in Figure 2. It is clear or distinguished by one of ordinary skill in the art that a coding rate of a channel encoder is not related with a rate matching block. For similar reasons, 3GPP TS does not disclose or teach the channel encoder of claim 84.

The Patent Office asserts that the 3GPP2 standard is specifically designed for two transmission modes, a flexible data rate mode and a variable data rate mode (see page 7 of the Office Action). However, the 3GPP TS does not support such a statement. In fact, it is respectfully submitted that the Patent Office is stating the present standard technology, but at the time of the 3GPP TS, the concept of the flexible data rate or the variable data rate was not adopted.

3GPP TS fails to disclose all the features and the combination thereof, as recited in independent claims 61 and 84. Hence, withdrawal of this rejection is respectfully requested.

Claims 64 and 75-83 stand rejected under 35 U.S.C. §103(a) over 3GPP TS. This rejection is respectfully traversed. Claims 64, 70, 72-74 and 75 depend from independent claim 61. As set forth above, 3GPP TS does not disclose or teach all the claim features. It is respectfully submitted that these claims are allowable for the reasons set forth above, and 3GPP TS alone cannot teach the features found lacking, and additional features recited in these dependent claims. Hence, withdrawal of this Section 103 rejection is respectfully requested.

Claims 70 and 72-73 stand rejected under 35 U.S.C. §103(a) over 3GPP TS in view of U.S. Patent No. 5,438,590 (hereinafter, "Tzukerman"), and claims 74 and 79-83 stand rejected under 35 U.S.C. §103(a) over 3GPP TS in view of U.S. Patent No. 6,332,209 B1 (hereinafter, "Eroz"). These rejections are respectfully traversed.

These claims depend from independent claim 61. It is respectfully submitted that both references fail to disclose or teach the lacking features set forth above. Hence, the both combinations cannot result in the claimed invention, and a *prima facie* case of obviousness has not been established, as required under Section 103. Withdrawal of these rejections is respectfully requested.

New claims 156-192 have been added, where claims 157-174 depend from independent claim 156, and new dependent claims 175-192 are allowable for similar reasons as independent claim 84. New claim 156 recites "encoding input data to be transmitted at an adjusted coding rate, the adjusted coding rate being adjusted according to a ratio of a channel interleaver size and a number of bits of the input data," and the combination thereof, and it is respectfully submitted that such combination of features is neither disclosed nor taught.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes

would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Daniel Y.J. Kim, at the telephone number listed below.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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